

## **IN THE CLAIMS**

### **Listing of Claims**

1. (Previously Presented) A signal processing apparatus for receiving a time divisional multiplexed signal including a plurality of kinds of data, said signal processing apparatus comprising:

switching signal generating means for identifying a type of each of a plurality of kinds of data received as part of said time divisional multiplexed signal, wherein said identification is based on information in a header of said time divisional multiplexed signal, said switch signal generating means generating a signal containing the type of data;

memory means for storing each of said plurality of kinds of data to one of a plurality of memory areas according to the identified type;

processing means for executing one of a plurality of functional operations corresponding to the type of data of said time divisional multiplexed signal read from said plural memory areas at certain timing;

memory input/output control means for selecting the area for storage in said memory means of a type of data in accordance with its identified type, retrieving from said memory means the stored data to be read by said processing means and supplying to said memory means data generated by said processing means after execution of one or more of the plurality of functional operations; and

changing means for changing the operation of said processing means to one of said plurality of functional operations, corresponding to the type of data at the timing of the transit of said data to the processing means.

2. (Original) A signal processing apparatus according to claim 1, wherein said processing means provides an output generated by said processing means to an input terminal of a device corresponding to each kind of the data of said time divisional multiplexed signal.

3. (Original) A signal processing apparatus according to claim 1, wherein:  
said processing means comprises:  
first data-extracting means for extracting a plurality of data as class data from said data;  
characteristic signal output means for outputting a signal indicating characteristics of said class data based on said class data; and  
generating means for generating output data based on the signal indicating the characteristics.

4. (Original) A signal processing apparatus according to claim 1, wherein:  
said processing means comprises:  
first data-extracting means for extracting a plurality of data as class data from said data;  
characteristic signal output means for outputting a signal indicating characteristics of said class data based on said class data;  
second data-extracting means for extracting a plurality of data as generation data from said data;

storage means for storing coefficient information corresponding to the signal indicating the characteristics; and  
generating means for generating output data by performing computation using said generation data and said coefficient information.

5. (Original) A signal processing apparatus according to claim 3, wherein said first data-extracting means extracts said class data based on class data forming information set in accordance with an instruction from said changing means.

6. (Original) A signal processing apparatus according to claim 4, wherein said second data-extracting means extracts said generation data based on generation data forming information set in accordance with an instruction from said changing means.

7. (Original) A signal processing apparatus according to claim 4, wherein said storage means stores said coefficient information according to the type of said data, and outputs coefficient information, corresponding to the signal indicating the characteristics, from among said coefficient information corresponding to an instruction from said changing means.

8. (Previously Presented) A signal processing apparatus according to claim 1, wherein said plurality of functional operations are noise and luminance adjusting.